



PACIFIC NORTHWEST RESEARCH FOUNDATION

Laboratories For Medical Research

DEPARTMENT OF MICROBIOLOGY

May 24, 1974

Dr. William U. Gardner
Scientific Director
The Council for Tobacco Research
110 East 59th Street
New York City 10022

Dear Bill:

The enclosures include reprints that provide background information on the small animal models that have been developed in our Department and elsewhere, together with some of the basic information that has been obtained by these models in approaching both the obvious and the more subtle problems associated with atherosclerosis, arterial coronary diseases and some of their known precursory conditions such as environmental stress, essential hypertension, defective renal function, etc.

It is obvious that there are many areas where these small animal models can be brought to bear upon the etiology of cardiovascular disease and associated syndromes. A pertinent ^{example} is the comparative role of environmental circumstances, which can be controlled in our laboratories with infinitely greater precision than by other presently known approaches.

As you know from our discussions, we are now in the fortunately unique position of controlling the environment, insofar as mice are concerned, ranging from severe social and physical stress to a tranquil environment that provides a very low corticosterone baseline, which we feel is a good index of biological serenity, and thus prerequisite to freedom from CNS, hormonal, enzymic, and other adverse physiological factors which are either causal, or synergistic with other conditions such as diet, genetics, or exposures to biological or chemical carcinogens or other pathological potentiating substances.

Some of the logical approaches which we visualize as effective experimental means for providing basic information on the etiology and possible modification of atherosclerosis, hypertension, renal pathologies, and cardiovascular diseases are outlined in the attachments which are submitted as a preliminary grant application.

The multiple disciplinary approach which we propose is feasible through the combined background experiences of Dr. George Santisteban, a pioneer in developing our understanding of the pituitary-adrenal-thymus-corticoid axis; Dr. Darrel Spackman, a biochemist with a superb background of experience in proteins, enzymes, amino acids, and gluco corticoids. My own background includes laboratory experiences and training in animal and cell biology, virology, experimental chemotherapy, enzymology, and cellular metabolism.

I trust that the enclosures will provide you and your colleagues with an adequately clear indication of the areas where we are both interested and competent to provide basic scientific information that will have application in the prevention and possible reversal of human pathologies that cause such a high mortality.

Sincerely,

1003544274

Vernon
Vernon Riley, Chairman Dept. of Microbiology

Member, Fred Hutchinson Cancer Research Center